PROTECTO NATIONAL PROTECTO

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1 1 CONGRESS STREET, SUITE 1100 BOSTON, MASSACHUSETTS 02114-2023

OFFICE OF THE REGIONAL ADMINISTRATOR

August 8, 2016

George Price, Superintendent Cape Cod National Seashore 99 Marconi Site Road Wellfleet, Massachusetts 02667

RE: EPA Comments on the Department of the Interior National Park Service Herring River Restoration Project Final Environmental Impact Statement/Environmental Impact Report, Wellfleet and Truro, Massachusetts (CEQ# 20160154)

Dear Mr. Price:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, we have reviewed the May, 2106 Final Environmental Impact Statement/Environmental Impact Report (FEIS/EIR) for the Herring River Restoration Project in Wellfleet and Truro, Massachusetts. The FEIS/EIR was prepared by the Department of the Interior National Park Service (NPS) and Herring River Restoration Committee to evaluate the impacts of tidal restoration in the Herring River flood plain within the Cape Cod National Seashore (CCNS).

The Herring River restoration project in Wellfleet and Truro, Massachusetts is the largest tidal restoration project in New England, with the potential to restore about 880 acres of estuarine habitat which has been severely degraded as a result of tidal restriction since 1909. The loss of estuarine habitat and degradation of water quality from this tidal restriction has been well documented. This includes low dissolved oxygen, low pH, high metals, and loss of river herring migration. In 1980 a large pulse of acidic water killed fish and American eel in the estuary. The continued degradation of water quality cannot be reversed without restoring tidal flow and flushing to the estuary. The past conversion of salt marsh to freshwater wetlands has also resulted in a loss of carbon storage and release of methane, a greenhouse gas. Restoring the Herring River will restore salt marsh wetlands and "Blue Carbon" storage in marsh sediments and peat.

Similar loss of estuarine habitat has occurred throughout our New England Coast behind every tidal waterway where tide gates have been constructed. The degraded conditions created in the 1100 acre Herring River estuary appears to be the largest tidal restriction to salt marsh in New England, and the best studied. We applaud the National Park Service and the Herring River Restoration Committee for their long term efforts to bring this important project to this stage of environmental review.

EPA appreciates the responses provided to our comments on the DEIS and concurs with the Herring River Restoration Committee (HRRC) and National Park Service choice of Alternative D with Mill Creek Option 2, elevation of the Chequessett Yacht and Country Club (CYCC) golf course as the environmentally preferred alternative. This alternative maximizes the restoration area while protecting, preserving, and enhancing historic, cultural, and natural resources. The elevation of the CYCC golf course would require approximately 150,000 cubic yards of fill, which is expected to be obtained by borrow activities on about 5 acres of upland. Alternative D allows partial restoration of tidal hydrology with tide gate control at Mill Creek.

Alternative A, the no action alternative, is environmentally unacceptable and would perpetuate low pH, high metal concentrations and fish kills brought on by over 100 years of tidal restriction. As a result, Herring River would continue to be listed as an impaired water on the Clean Water Act 303(d) list¹. Alternative B does not construct a dike across the Mill Creek embayment and, therefore, limits the potential high tide height in the estuary and restoration outcomes through adaptive management in order to protect low lying development in Mill Creek. Elevation or relocation of five golf course holes is necessary in alternative B. Alternative C and D, both add a Mill Creek dike, and differ only with respect to controlled tidal flow, or no tidal flow through tide gates. The elevation or relocation of the golf course would not have to occur in Alternative C; however, a pump may be required to avoid flooding behind the new dike. EPA prefers to see the fullest restoration potential, which could only occur with Alternative D.

The new tide gate structure across Mill Creek is expected to require 12,500 square feet (s.f). of permanent wetland fill and 2.4 acres of temporary impact to wetlands for the work area. High Toss road reconstruction is expected to alter approximately 13,000 s.f. of wetland. Changes to [I am guessing her] Pole Creek Road, and Bound Brook Road are expected to alter 4,000 s.f. of wetland. The FEIS mentions that further engineering studies will be undertaken with respect to the potential use of the former railroad right-of-way as an alternative to address the expected need to elevate approximately 8,000 linear feet of low lying roads. EPA supports these additional studies. The proposed elevation of low-lying portions of the golf course requires approximately 360,000 square feet (8.3 acres) of wetland fill. Most of this wetland is now a developed part of the golf course. These new impacts to jurisdictional wetlands appear acceptable, given the overwhelming net positive impacts that the Herring River restoration project is expected to provide.

EPA will review the permit application to the Army Corps of Engineers for the proposed work. We will also stay involved as part of the anticipated federal/state regulatory oversight committee. Submission of permit application plans will need to include details for dewatering, by-pass pumping, and other construction means and methods that have been assigned to the contractor to prepare and submit. Maintaining flow and fish passage during construction and operation of the project is important. The intended operation and control of tide gates and incremental opening will likely need to include oversight by the Corps of Engineers and the Massachusetts Department of Environmental Protection and include a committee with other resource agencies—consistent with the approach for other federal permitting reviews for other new tide gate projects. Since additional tide gates are also

¹ The term "303(d) list" or "list" is short for a state's list of impaired and threatened waters (e.g. stream/river segments, lakes).

proposed at Pole Dike Creek and Bound Brook, EPA suggests consideration of fish friendly tide gates. Conventional flap gates and other one way drainage gates restrict fish and wildlife movements.

The FEIS notes that vegetation management and earthworks will occur when the ground is frozen and before project implementation to minimize impacts. We support these types of measures and suggest that low ground pressure equipment be used and that the project consider investment in an amphibious excavator. The USFWS provided amphibious excavator support at the Galilee Bird Sanctuary restoration project in Rhode Island where it was able to traverse the creeks and work in areas inaccessible to conventional equipment without temporary road construction in the wetland.

The new Chequessett Neck Road dike is being designed to include safe fishing access points, launch sites on the upstream and downstream sides of the new dike, and a safe portage route. The stairway and portage route over the bridge embankment depicted in the photo rendering for the proposed dike, appears to have tight turns and hand railings that may interfere with portaging long boats. The design for railings and dimensions of the portage route should consider the turning radius of 17 foot canoes and kayaks. Most boaters would prefer to navigate a fast channel flow in order to avoid a portage route. Hazardous conditions for boaters will exist with the proposed incremental opening of removable panels and tide gate structures. We encourage the NPS to consider these issues as it works to refine the design of the dike structure at Chequessett Neck Road.

Since the Chequessett Neck Road bridge structure will be over a navigable water, permit approval may be required by the US Coast Guard under Section 9 of the Rivers and Harbors Act. A plan to manage tidal flow through the 165 foot opening by only a few inches incrementally over an extended period of time puts a premium on well-designed portage options that can be used for safe recreational access until such time that several dike panels are fully removed providing for acceptable passage with sufficient head clearance at different tidal stages. Managing fishing activity from the bridge to help avoid conflicts between boaters and fishermen will also be necessary as use of the bridge evolves over time.

We appreciate the opportunity to comment on this FEIS/EIR. Please feel free to contact me or Timothy Timmermann, Associate Director of the Office of Environmental Review at 617/918-1025 if you wish to discuss these comments further.

Sincerely,

H. Curtis Spalding Regional Administrator cc:

Secretary Richard K. Sullivan, Jr.
Executive Office of Energy and Environmental Affairs (EEA)
Attn: MEPA Office
Holly Johnson, EEA No. 14272
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114